

II. Amendments to the Drawings

Please replace sheet 1 of the drawings with replacement sheet 1 including amended Figures 1 and 2. The figures have been amended to include descriptive text in relation to numerals 12, 14, 16, 18, 26, 28, 42 and 44, in accordance with the examiner's suggestions.

III. Remarks

Reconsideration and re-examination of this application in view of the above amendments and the following remarks is herein respectfully requested. Claims 1-12 remain pending.

Allowable Subject Matter

The examiner indicated claims 10-11 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, claims 10 and 11 have been rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Claim Objections

Claims 6, 7, 10, and 11 were amended to correct the informalities noted by the examiner. Accordingly, applicants request withdrawal of the objections to claims 6, 7, 10 and 11.

Claim Rejections - 35 U.S.C. §102(b)

Claims 1, 3, 5-7, and 9 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,304,909 to Jin et al. (Jin). Applicants traverse this rejection.

Claim 1 provides for a bridge tied load amplifier. Inherently a bridge tied load amplifier produces a differential output creating a larger output voltage range than the power voltage range. This effect may be particularly useful when a vehicle is operating on a battery voltage that is less than the full battery voltage. A bridge tied load amplifier would allow the system to continue to operate in a low voltage battery condition and would not require an additional voltage converter to be utilized. Accordingly, in the embodiment illustrated in Figure 1, the bridge tied load amplifier has one differential output in communication with one side of the coil and a second differential output in communication with the other side of the coil.

Jin does not teach a bridge tied load amplifier. Rather, Jin teaches a single output amplifier utilizing a current push/pull effect. Clearly, Jin does not teach a bridge tied load amplifier as provided in the claims. Therefore, Jin does not anticipate the present invention under 35 U.S.C. §102(b). Accordingly, applicants respectfully request withdrawal of the rejections under 35 U.S.C. §102(b).

Claim Rejections - 35 U.S.C. §103(a)

Claims 4 and 8 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,304,909 to Jin et al. (Jin). Applicants respectfully traverse this rejection.

Since claims 4 and 8 depend from claim 1, these claims are, therefore, patentable for at least the reasons given above in support of claim 1.

New Claims


New claim 12 includes similar limitations to claim 11, such as the second amplifier having an inverted output. Further, claim 12 depends from claim 1 and is, therefore, patentable for at least the same reasons given above in support of claim 1.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is respectfully requested.

Respectfully submitted by,

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